

# MATHS AT RAVENSCOTE FOR YEAR 3

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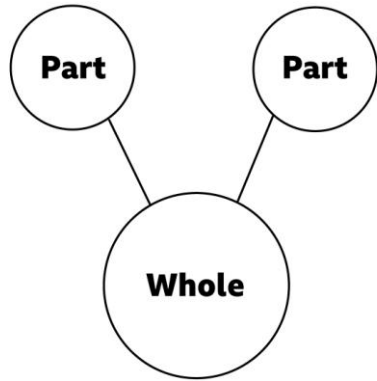
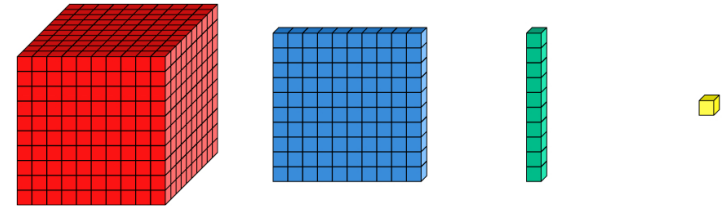
# Our aim for this session

To help you to understand the methods we use to teach your child column addition and subtraction

To help you feel more confident with helping your child with maths at home



# Children's prior knowledge



$$5 + 5 + 5 + 5 = 20$$

$$20 \div 4 = 5$$

$$5 \times 4 = 20$$

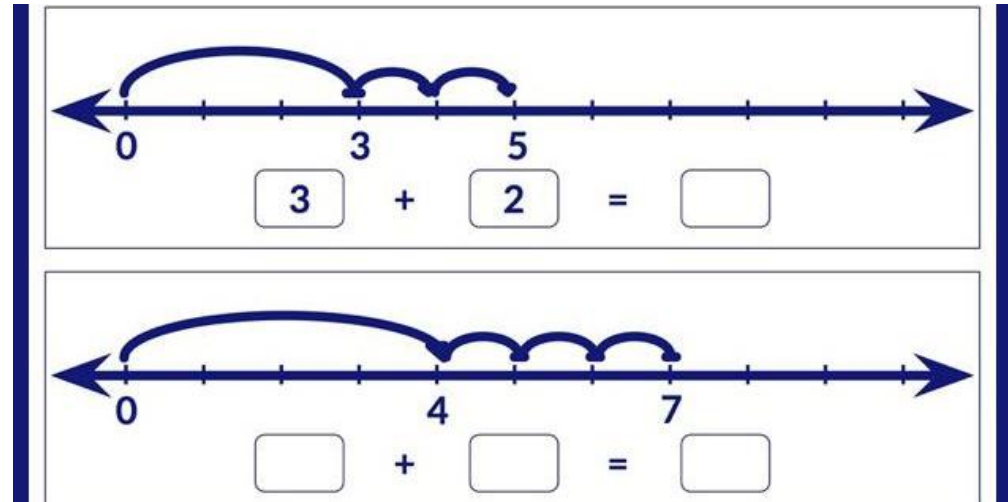
$$20 \div 5 = 4$$

## DECIMAL PLACE VALUE CHART

THOUSANDS TO THOUSANDTHS

Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths

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# Column addition

- By the end of year 3 children are expected to know how to add 3-digit numbers without and with exchanging
- We talk about putting the numbers into the correct place value columns – ones, tens, hundreds

$$\begin{array}{r} 214 \\ +162 \\ \hline \end{array}$$

$$\begin{array}{r} 268 \\ +352 \\ \hline \end{array}$$

DECIMAL PLACE VALUE CHART

THOUSANDS TO THOUSANDTHS

Thousands	Hundreds	Tens	Ones	Tenths	Hundredths	Thousandths

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# Column subtraction

- By the end of year 3 children are expected to know how to subtract 3-digit numbers with exchanging

$$\begin{array}{r} 587 \\ -395 \\ \hline \end{array}$$

- Common mistakes we see is children swapping the digits in the numbers so they don't need to exchange

# Vocabulary

- Hundreds
- Tens
- Ones
- Place value
- Multiple
- Synonyms for add
- Synonyms for subtract
- Exchange
- Greater than
- Less than
- Equal to
- I know this number is greater because \_\_\_\_\_
- I know this is true because \_\_\_\_\_
- In 767 the value of the 6 is \_\_\_\_\_, I know this because \_\_\_\_\_.

# Reasoning

True or False ?

Add and subtract 100s

$$547 - 400 = 507$$

Children would be expected to show a column addition or subtraction to match this.  
Then write a statement e.g This is true/ false because ...  
Using mathematical vocabulary.

# Reasoning

True or False ?

Add 10s across a 100

If you add 60 to 487, only digit in the tens column will change.

Again, children would be expected to show their working out to prove this.  
Then write a statement e.g This is true/ false because ...  
Using mathematical vocabulary.

# Greater depth challenges

Here is a number.

H		T		O	
100	100	10	10	1	1
100	100	10	10	1	
100	100	10			

**a)** Add 4 ones to the number.

What is the answer?

**b)** Tom says if you subtract 2 ones from the number, you get 633

What mistake has Tom made?

Tiny completes a subtraction.



$$487 - 50 = 482$$

Use base 10 to show that Tiny is wrong.

What mistake has Tiny made?

A barrel contains 175 litres of water.



2 buckets of water are poured into the barrel.



There is now 265 litres of water in the barrel.

How much water could have been in each bucket?

How many different answers can you find?

# Times tables



- Times tables form the foundation of all maths, we do teach the children this in maths lessons but need your support at home to ensure it is consolidated.
- Little and often and make it fun and low stakes!
- You should be able to say  $5 \times 3$  to your child and they can answer within 6 seconds – replicates the Year 4 MTC check

## Tricks

- **Memorise a TT fact and count on from there** rather than starting from scratch each time e.g.  $5 \times 4 = 20$ , then I can work out  $5 \times 3$  and  $5 \times 6$
- **Chant together** – start slowly, add a rhythm, build up pace.
- **Dance it** – use a repeating rhythm of three actions (like jump, clap, spin) and say the numbers as you go. Keep the pattern the same – the rhythm helps the facts land.
- **Write them out** – yes, you could use pen and paper but you could also... use chalk on paving slabs, whiteboard markers on windows, chocolate chips on cakes – try something different to make it fun and feel more like play!
- **Sing it** – set tricky tables (like the 7s or 8s) to a simple tune – e.g. '1 x 7 is 7, 2 x 7 is 14...' to the tune of *Row, Row, Row Your Boat*. Silly? Yes. Effective? Also yes.
- **Stick facts around the house** – bathroom mirrors, bedroom doors, fridge doors.
- **Make mistakes on purpose** – see if they spot them!

# Websites to support

[Timestables.com](https://www.timestables.com)

- TT Rockstars homework weekly
- Century - adapts for their ability and is set fortnightly
- Times tables
- White rose app - Individual one-minute tasks focus on an adding and subtracting
- BBC Bitesize



# Thank you for coming and thank you for your support

- Any questions?
- Times tables are paramount to progress in maths so this is always good place to start with practice.

